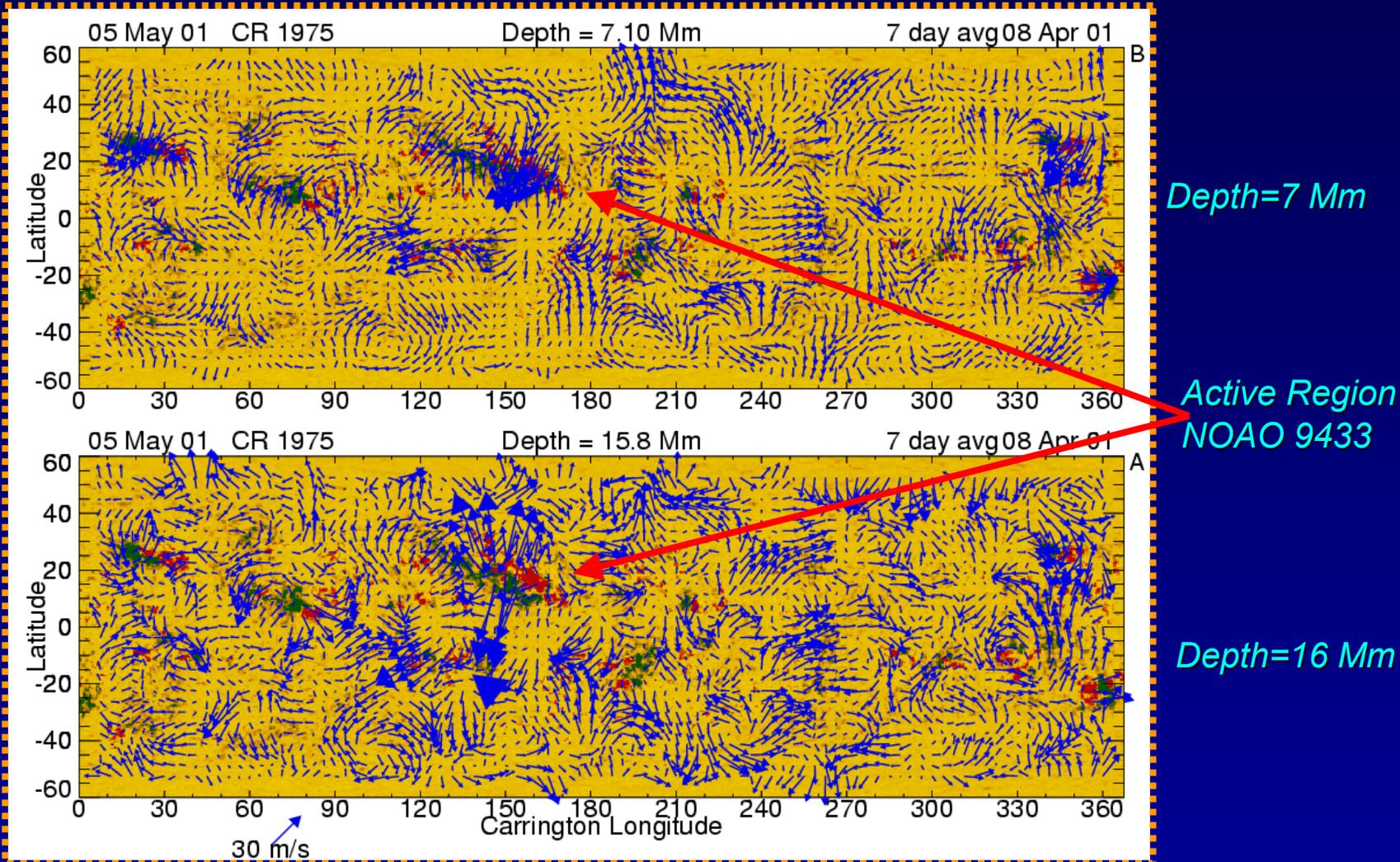


# Interactions Between Magnetic Activity and Large-Scale Subsurface Flows

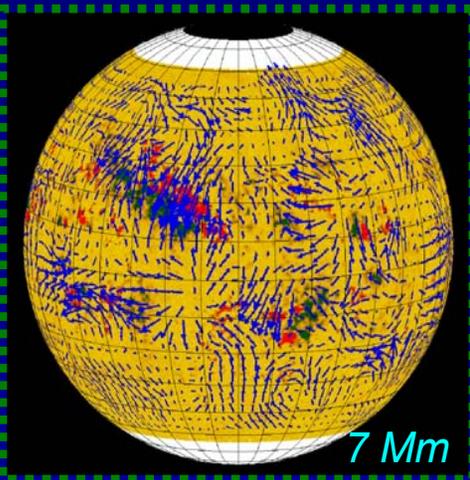
## Synoptic Flow Maps for CR 1975 in 2001



Blue arrows show the flow field relative to the differential rotation  
Red and Green indicate the polarity of regions of strong magnetic field.

# Interactions Between Magnetic Activity and Large-Scale Subsurface Flows

- Most solar active regions are sites of inflow near the surface
- Some active regions (e.g., NOAO 9433) possess strong outflow at depths below 10 Mm.
- Those active regions with deep outflows tend to be large in magnetic flux and area coverage.
- Preliminary results indicate that active regions undergoing intense flare activity also possess strong outflows.
- These strong outflows may prove useful in flare prediction.



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